



REPORT FROM THE PRESIDENT

Plans for our annual meeting next December in Washington are well underway, with President-elect Stanley Mulaik organizing the program sessions, and Richard Westwood and Drew Chick of Washington serving on the local committee of arrangements. C. W. Mattison is also assisting in programming a joint session on elementary science.

Members who would like to participate on the program should write to Prof. Mulaik at the University of Utah, Salt Lake City, Utah. Drew Chick is in charge of planning the field trip for ANSS and NABT.

Glidden Baldwin has gotten his membership drive underway now and will welcome more volunteers for his committee. Address him at Catlin, Illinois.

The Pacific Division meets at Logan, Utah this June. Write to Stanley Mulaik for program details.

The nominating committee will welcome your suggestions for officers for next year. President-elect; two vice-presidents; secretary and five directors. Send your suggestions to Chairman Dorothea Mulaik, University of Utah, Salt Lake City, Utah. Other committeemen are Richard Westwood and Verne Rockcastle.

What Is Nature Study?

Perhaps the following quotations from three different publications will help define it.

"How quickly can a keen interest in Nature be evoked by a friendly interpreter. To enter this domain with the seeing eye and the hearing ear is to find something new each hour. To remain is to become *Nature-alized*, to become a citizen of nature, enlisted to discover facts, to think more clearly, and to enjoy life more fully. This is knowledge not procurable from libraries. You yourself must smell the dark earth and feel the touch of the night wind; you must taste the bark of young birches, see the wake of the swimming muskrat, and hear the whir of the startled partridge."

—OUT OF DOORS, Paul B. Mann and George T. Hastings.

"Nature is an exciting, adventurous journey of discovery into the world of plants and animals, rocks and minerals, the weather and the sky. Its expeditions and explorations disclose the interesting

and important things about blades of grass, spider webs, hawks, paving stones, eroded hillsides, flight of birds, the majesty of the night sky. With "watch living things live" as a password to nature, eyes are open wider on field trips, gardens are planted, and experiments made with seeds and seedlings; trees are adopted, and caterpillars, pollywogs, pet dogs, or any one of a thousand other living things are watched day by day."

—ADVENTURING IN NATURE, Betty Price (Nat. Recreation Association)

Mrs. Anna Botsford Comstock, in her *HANDBOOK OF NATURE STUDY*, gives us the following definition of nature study. "Nature-study," she says, "is, despite all discussions and perversions, a study of nature; it consists of simple, truthful observations that may, like beads on a string, finally be threaded upon the understanding and thus held together as a logical and harmonious whole. Therefore, the object of the nature study teacher should be to cultivate in the children powers of accurate observation and to build up within them understanding."

The Species Complex and the A.N.S.S.

When on the itinerant faculty of the National Recreation Association (1936) I spent fascinating hours studying the history of nature study. In New York City I visited the Columbia University Library and asked for material on Woodhull, Caldwell, and Bigelow. The astonished librarian said: "They are not dead yet." This was characteristic of the largest Teachers College factory.

It was about this time that "TC" mutated a new variety which I shall refer to as *Homo sapiens, variety mugwumpus*, wumpus from the Algonquian meaning *bolter*, their mug on one side of the fence and wump on the other side. They characterized themselves as superior in character and in intelligence. They approached nature without sentiment and formed a coterie which became a major factor in the modus operandi of science teaching. These "Pharisees" (*H. sap. var. mugwumpus*) thought of the members of A.N.S.S. as "fabulists" (*H. sap. var. unnatura*). Transcendentalists — Channing, Emerson, Thoreau were taboo. To write poetry — Holmes, Lowell, Whittier — was not pure. Such cultural species as Burbank, Ernest Seton Thompson, and Thornton W. Burgess were not spreading ideas from the science locus. Bailey,

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Special Notice

To Every A.N.S.S. Member

Dr. S. Glidden Baldwin, our first Vice-President and Membership Chairman, advises that the *State Chairman* who gets the most new members *this year* will have his hotel bill paid at the next Annual Meeting of the A.N.S.S. in Washington, D. C. in December. Everyone please get busy and help your State Chairman win.

AMERICAN NATURE STUDY SOCIETY NEWS LETTER

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Helps For Nature Explorers

Although nature exploration is by no means a one-season activity, summer vacation time seems especially appropriate for family or individual nature projects, at home, on trips, or in camp. The ten books listed here were chosen because they are intended to stimulate, as Liberty Hyde Bailey put it, "seeing what you look at, and drawing proper conclusions from what you see." Most of them combine general information with suggestions for both outdoor and indoor activities. None emphasizes identification. The first seven are general helps, for individual or group use. The others are examples of special-interest books, of which many are now on the market.

SCIENCE IN YOUR BACK YARD. By Elizabeth K. Cooper. Harcourt, Brace & Company, New York City. 1958. 192 pages. Planned for age 10 and over, this book presents general suggestions on how to begin exploring at home and for backyard discoveries about plants, animals, soil and rock, water, clouds, weather, atmosphere and outer space, and the stars. Many simple activities are suggested, with directions for making and using simple equipment. The book should do much to increase awareness of one's immediate surroundings anywhere in the United States, although northerners may wish that more specific mention had been made of salamanders as possible backyard inhabitants.

NATURE IS YOUR GUIDE. By Harold Gatty. E. P. Dutton and Company, New York City. 1958. 287 pages. The subtitle, *How to Find Your Way on Land and Sea*, indicates the content of this intriguing book, by a group captain of the Royal Australian Air Force during World War II. Well illustrated in color and black and white and with diagrams and maps, it is an outgrowth of the author's *Raft Book*, which was standard equipment in United States Air Force life rafts during the war. For outdoorsmen of all ages.

EXPLORING NATURE WITH YOUR CHILD. By Dorothy E. Shuttlesworth. Greystone Press, New York City. 1952. 448 pages. This book, by the editor of *Junior Natural History Magazine*, is planned for parents or other leaders to use with children. Chapters are devoted to various groups of animals and plants, and to astronomy and weather. Well chosen activities are included.

NATURE GAMES AND ACTIVITIES. By Sylvia Cassell. Harper and Brothers, New York City. 1956. 87 pages. This

brief book contains a varied collection of simple and interesting games and activities concerned with common plants and animals. Planned for ages 8 to 12, it is designed for individual or for group use.

FIELD BOOK OF NATURE ACTIVITIES. By William Hillcourt, G. P. Putnam's Sons, New York City. 1950. 320 pages. Prepared by a member of the National Staff of the Boy Scouts of America, this book is a valuable help for young naturalists and their leaders. Fields covered include various plant and animal groups, nature photography, nature collections, and nature leadership.

HAMMOND'S GUIDE TO NATURE HOBBIES. By E. L. Jordan. C. G. Hammond and Company, Maplewood, New Jersey. 1953. 64 pages. This profusely illustrated book contains suggestions for collecting, identifying, and storing specimens of many kinds; directions for establishing and maintaining terraria and aquaria; and sections on bird hobbies and nature and wildlife photography. For all ages.

THE BOOK OF NATURE HOBBIES. By Ted Pettit. Didier Publishers, New York City. 1947. 280 pages. The 200 nature projects presented in this book are designed for use "wherever there is a small patch of the out-of-doors." They deal with various groups of plants and animals, emphasizing their ways of life. For age 12 and up. (See your library; this book out of print.)

EXPERIMENTS IN SCIENCE. By N. F. Beeler and F. N. Branley. Thomas Y. Crowell Company, New York City. 1955. 138 pages. This is one of several books by the same authors that describe simple experiments, many using only common household equipment. For age 9 and above.

HOME-MADE ZOO. By Sylvia Greenberg and Edith Raskin. David McKay Company, New York City. 1952. 245 pages. A practical handbook on the care of common rodents, cage birds, reptiles, amphibians, and tropical fish. Planned to be of help to youth leaders as well as to young pet owners.

THROUGH THE MAGNIFYING GLASS. By Julius Schwartz. McGraw-Hill Book Company, New York City. 1954. 142 pages. This fascinating book tells about lenses and how to use them and suggests many easily available things to examine. For age 9 and above. Well designed for individual use.

EVA GORDON

Briefs

The Isaac Walton League of America, Inc. has launched a vigorous program for "Building a Better America." This program in essence will be centered in a rejuvenated publication, *OUTDOOR AMERICA*. Among the major planks for the 1958 program for this great organization is a strong platform of national conservation legislation; more nationally sponsored action projects for local chapters; a regular news service for press, radio and TV; new services for old and new members; and a realistic national dues fee to finance a vigorous program.

* * *

We quote from a news release by E. Laurence Palmer, prepared for the Theodore Roosevelt Centennial Commission in honor of the 100th anniversary of Theodore Roosevelt's birth, in 1958: "History is replete with accounts of country boys who come to the big city and 'make good.' Theodore Roosevelt exemplifies the story of the city boy who spent his teen-age years profitably learning to understand what was going on in the natural history field in the open country. Fortunately he was placed in history to be able to see and participate in the awakening of his beloved nation to the importance of its natural resources. Fate presented him with the opportunity to direct and accelerate a rational appreciation of conservation matters and to put this appreciation into effect. Those who immediately preceded and succeeded him in the White House would not have provided the dynamic, inspired and intelligent leadership in conservation which Theodore Roosevelt was able to give. We owe it to the teen-agers of today and to the future of our country that there be a maximum recognition of the service Theodore Roosevelt gave to conservation, nationally and otherwise.

* * *

Dr. S. Glidden Baldwin, 1st Vice President of A.N.N.S. and Secretary of the Vermilion County Audubon Society writes the Society attempts to teach these values: the interdependence of man with all phases of his environment; the need to put ourselves in our own proper perspective as only a small cog in Nature; realization that the higher we progress in the scale of life, the more dependent we become upon our environment. Dr. Baldwin says man has paid a price for his intelligence, he has lost his instinct to care for himself. Every child that is born has to be taught through the intelligence of its parents and others how to make it way. We need more education—but not in the classrooms. We must

use the same five senses that have kept the animal world alive, to acquire a knowledge of the world about us. By observing our natural environment, we will come to realize that man is still dependent, not on a benevolent government, or union, but on the soil, the air we breathe, the minerals, plants and animals, the climate and sunshine and the products man has been able to manufacture from our natural resources.

* * *

Edwin A. Mason, Director of Arcadia Wildlife Sanctuary, Northampton, Massachusetts, writes that E. Laurence Palmer once expressed the hope that at some future time every community in the United States would have a WILDLIFE SANCTUARY. Although this ideal has not been reached, there has been, in the last ten years, a remarkable increase in the number of sanctuary areas throughout the land. Some of these are privately owned; some are operated by governmental agencies, and some, interestingly, belong to school systems. Mr. Mason feels that perhaps of even greater importance is the awareness among conservation leaders that the pressures of a rapidly increasing population are such that we have little time left in which to set aside as sanctuaries, areas whose habitats would be superior for this purpose. Marsh areas, because they carry the largest number of wildlife species and are rich in plant life too, he mentions as being particularly desirable to sanctuaries.

Mr. Mason gives this conception of a sanctuary:

An area which hunting and fishing are prohibited; where all forms of plant and animal life are protected but may be so managed as to enable the greatest numbers of plants and animals to live together on the area. The sanctuary becomes an outdoor natural history museum where the normal interactions of plants and animals in their natural environment can be observed for scientific study, and a setting for the teaching of the general public who visit the sanctuary.

* * *

Camp Edith Macy Training School for Girl Scout Leaders established in 1926, will expand its facilities and program. Architects, landscape architects and engineers have already made plans for two new permanent buildings, one a dormitory, the other for central services. The goal is for year-round training, including advanced training of the conference type. In view of increasing professional interest in Girl Scouting on the part of men, the new developments at Macy will include living accommodations and events of special interest for men.

Dr. D. A. Williams, Administrator of the U.S. Soil Conservation Service, in an address given at the 23rd North American Wildlife Conference in St. Louis, urged all organizations interested in wildlife conservation to "join with soil conservationists in a potent working relationship that will benefit all land resources and all users of these resources." As a theme for his talk, he used Aldo Leopold's definition of conservation as "a state of harmony between men and land."

* * *

The American Forestry Association, 919 17th Street, Washington, D.C., will be glad to send you a folder describing its back country trail riding trips for this summer and fall to "the little kingdoms of the wilderness." Included are trips to the high country in the West, to the Smokies, and a canoe trip into Minnesota's Quetico-Superior Wilderness Area.

* * *

The School of the Outdoors at Branchville, New Jersey, has a tract of 100 acres nestled among the western New Jersey hills and is completely surrounded by 40,000 acres of state forest. Burton P. Cummings, our informer, says that a group of educators will bring a "class" of young people to this school to do scientific study of the out-of-doors and build a better understanding of the conservation of our natural resources. An adult program of a similar nature is planned for the future.

* * *

National Audubon Society asks that the Department of Agriculture stop broadcast use of all highly toxic chemicals in their insect control programs until conclusive evidence becomes available that no serious damage to human beings and wildlife resources will result. The Society reports that the use of toxic chemicals for the protection of farm and forest crops has now reached the point where cumulative secondary poisoning of human beings and wildlife, which already exists, may become catastrophic. Since tests conducted by United States Fish and Wildlife Service reveal that second generation exposure to insecticides causes birds to become incapable of reproduction, it seems unthinkable that widespread programs using these chemicals be undertaken in the absence of proof that no similar cumulative danger exists with respect to other wildlife and to man.

Much of the current use of insecticides is by plane and experience shows that it is impossible to apply chemicals from the air without some multiple doses.

Briefs

The United States Post Office Department has announced that the *First Day Sale* of the Forest Conservation Commemorative Stamp on October 27, 1958, will take place in Tucson, Arizona. The ceremonies will be held at the opening session of the 83rd Annual Meeting of the American Forestry Association. October 27 will mark the 100th anniversary of President Theodore Roosevelt who has been referred to as the "Father of Conservation in America."

* * *

National Girl Scouts have a new publication, *Conserving Our Natural Resources*. This is a very practical bul-

THE SPECIES COMPLEX

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Comstock, and Schumucker were "nature fakirs."

The members of the A.N.S.S. could not go along with this slander. They did not believe that the "Pharisees" were the only ones fit to write textbooks, or that their dogmatic texts were infallible. We know that the "Pharisees" *did not* obstruct such candid writers as Bailey, Palmer, Patch, Teale, Westwood, and Peterson. The A.N.S.S. survived and has just celebrated its Golden Anniversary. Would that Bailey could have seen what maturation and evolution has achieved from the egg entitled "The Nature Study Idea." Hodge and Caldwell would have had satisfaction in the fauna and flora of 1957: Nature on postage stamps; humane education and wildlife; nature conservancy districts; and the ecology of public parks. These are distinct mutations from nature study. Park ecology is advanced nature study. The A.N.S.S. from the beginning has welcomed such mutations as "Study Nature, not Books," the object lesson, the orderly procession of reptiles and birds, et al toward the millennium without serious mental disturbance. Every step in the 50-year history of nature education has been exalted as an adventure.

The next 50 years calls for a continuing philosophy and faith in the wholeness of nature education, and a sympathetic understanding for new births (mutations) in educational endeavor. There is nothing wrong with this kind of discretion and constructive imagination. The species complex and cultural evolution is an affair of the world.

WILLIAM G. VINAL, "CAP'N BILL"
(Speaking at Annual Banquet of ANSS)

letin packed with workable ideas about conservation projects useful for children anywhere anytime. Conservation, the bulletin says, "is more than contour plowing or planting trees. It is knowing how to make use of all things — even time. It is being aware of the interdependence of all things in Nature. Conservation starts with individuals at home as well as in the out-of-doors."

* * *

"Materials for Teaching Conservation and Resource-Use," a 55-page bulletin has been prepared by the National Association of Biology Teachers and is now available for 35 cents from Interstate Printers and Publishers, Inc., Danville, Illinois.

The bulletin includes listings of free and inexpensive materials from state and national agencies, selected references, films and film strips, prepared by various members of the Conservation Committee of NABT, according to Dr. Richard L. Weaver of the University of Michigan, chairman of the Committee.

Good Books

PALMER'S FIELDBOOK OF MAMMALS. Dr. E. Laurence Palmer, E. P. Dutton and Company, Incorporated, N. Y., 1957, 321 pages, \$3.75.

An excellent field guide for all naturalists, young, old, scientist, and

amateur. It describes 300 mammals and all are pictured in pen and ink sketches. Drawings of tracks, skulls, teeth and scat, whenever these would be helpful for identification, are also given. The text, while concise, gives particulars about the physical appearance of each animal, tells about its habits, its food and where it lives.

A unique feature of the book is that many domestic animals are also included: dogs, cats, horses, cattle, sheep, swine. The author believes much can be learned about mammals from a study of domestic animals often much easier to observe. One learns too, something of the ancestry of the domestic animals and how present breeds have evolved. In the case of dogs, considerable detail is given in charts at the end of the book.

The forepart of the book discusses mammals in general, their varying abilities to see, hear, smell, taste, feel.

This is a different kind of guide to mammals, containing many interesting and important facts, usually hard to find. Dr. Palmer of Cornell University has prepared a very usable guide, packed with an amazing amount of well-organized information, yet small enough to fit in the pocket and travel with one into the field.

D. A. T.

Application for Annual Membership

Membership in the American Nature Study Society includes a membership card, a quarterly NEWSLETTER and the magazines you select. Please note you can get your membership for less than \$2.00, even free, by selecting the proper group.

GROUP COST		MEMBERSHIP COST
1	\$2.00 Membership only (NEWSLETTER)	\$2.00
2	3.00 Membership with Cornell Rural Leaflet (4 issues)	2.00
3	4.00 Membership with Canadian Audubon Magazine (5 issues)	1.00
4	5.50 Membership with Canadian Audubon & Cornell Leaflet	1.50
5	5.50 Membership with Nature Magazine (10 issues)	.50
6	7.00 Membership with Nature Magazine & Cornell Leaflet	1.00
7	8.00 Membership with Nature Magazine & Canadian Audubon	free
8	8.50 Membership with Nature Magazine & Canadian Audubon & Cornell Leaflet	free

Circle group desired, send application with name and address and check to

Dr. Howard E. Weaver,
202 Men's Old Gym, University of Illinois, Urbana, Illinois

AMERICAN NATURE STUDY SOCIETY
State Teachers College, Fitchburg, Mass.

Sec. 34.65 (e) P. L. & R.

